

## **Section VII. District Technology**

The District has made substantial investments in technology for instructional purposes. The Board of Education recently approved a \$1 million four-year replacement cycle for educator laptops to promote anytime and anywhere access. In the past five years, the District has invested over \$2.2 million to provide SMART boards for over 65% of the classrooms. During the summer of 2010, all K-4 classrooms were outfitted with sound amplification systems. The District has consistently allocated an average of \$250,000 per year for computers. The District has developed a 5-year technology life cycle plan to address aging and obsolete technology in the District. Infrastructure and hardware components life expectancy and year of replacement has been identified and is used annually to aid in the budgeting of technology.

While the financial investment in the technology hardware is evident, the integration of the technology to create engaging learning environments has not kept pace. Approximately 23% of all certified teachers completed training on the integration of technology into the classroom during the prior six-year period. The District participated in a state-sponsored technology and professional development initiative (eMints) for the 2004-2005 and 2005-2006 school years and then began a District-operated, instructional professional development program – Transforming Teaching through Technology. The District program, while affecting more than three times as many teachers and students as the eMints program, still does not meet the demand from teachers for professional development in integrating technology into the instructional program.

Integration of technology into the classroom setting to enhance and engage students begins with the curriculum. Over the next three years, the District is scheduled to review and revise 144 curricula and has plans to begin incorporating technology-based activities.

Preparing students for a global, competitive, and ever-changing workplace requires a new set of skills not intentionally incorporated into the curriculum or taught in schools today. Digital literacy is becoming an increasingly important skill for the 21<sup>st</sup> Century learner and this must be addressed for Francis Howell School District students. Other 21<sup>st</sup> Century Skills include communication, collaboration, creativity and innovation, and critical thinking. During the 2010-2011 school year, the District began to learn about and increase the awareness regarding the 21<sup>st</sup> Century Skills framework. A three-year 21<sup>st</sup> Century plan has been developed.

As the District continues to use technology as a strategic asset in the operation of the District and the business of education, there are some key trends in the K-12 technology world that should be considered. For example, the Internet provides an overwhelming array of resources for K-12 education. This includes the current trend of decentralizing the data center and moving traditionally locally hosted services to the Internet or “cloud.” Also driving technology developments and change is the expectation of being able to work and learn anytime, anywhere, on any device. The District should continue to put into practice these emerging technologies to maximize the District’s resources.

## **Future Focus**

### **1. Provide Support for 21<sup>st</sup> Century Learning**

The move to 21<sup>st</sup> Century learning will require transformational changes in the way curriculum is delivered. Process- and project-based types of learning across all content areas will need to be increased and integrated into everyday learning, including communication, creativity, collaboration and critical thinking. The District should prepare the internal and external communities (staff and parents) for the change from a traditional type of school environment, where the teacher is the expert, to an environment where the teacher is more of a facilitator and student learning is self-directed.

In addition to the action steps outlined in the Academic Future Focus area of this Plan, long-term planning should also include the following:

- Develop communication plans to enlist support from staff, parents, and patrons
- Provide professional development for teachers and administrators
- Re-align curriculum and assessments to address the new skills
- Implement technologies to support mobile, anytime, anywhere learning

A task force of business and community leaders, higher-education faculty, District teachers, administration, Board of Education members, parents, and students should be assembled to develop the long-range plan for creating 21<sup>st</sup> Century schools in Francis Howell.

### **2. Deliver Professional Development for Technology**

To ensure technology is used effectively and efficiently in the instructional environment, the District should provide the necessary time and tools to promote and encourage learning from basic technology skills to the integration of technology in classroom learning. The District should implement the necessary systems to deliver technology professionally, systemically, and in a variety of media. Employees should have the ability to self-direct their learning in an anywhere, anytime environment. The District should also develop a progressive professional development program that helps teachers determine and increase their level of proficiency.

### **3. Ensure All Students Have Access to Technology**

Efforts should be made to provide access to technology appropriate for the curriculum. Priority should be given to identify those students without access to technology at home and find the means to provide the technology components and connectivity while

away from school. The District should reach out to technology vendors and Internet service providers to build partnerships to help provide the necessary resources.

A complete physical inventory should be conducted to assess the equity of technology across the schools. The District should work to exceed the state averages for technology resources.

#### **4. Provide for a Technology Enriched Curriculum**

During the timeframe of this strategic plan, all District curricula reviewed and revised or created should include technology integration activities across all content areas. This integration should be centered on process and/or project-based learning that provide the opportunity for students to apply interdisciplinary skills, and should move beyond suggested websites or current technology tools.

The curriculum development process should incorporate open content resources, when appropriate. For learning to be engaging, a variety of digital resources should be used as opposed to sole reliance on the printed textbook. Open content allows for diverse media (e.g., video, audio, interactive links) that help reinforce the content or concept being taught. These resources are often more current and free for consumption.

Professional development for the content leaders and curriculum writers should be provided in the area of integrating the four Cs of 21<sup>st</sup> Century learning (communication, collaboration, creativity and critical thinking) using web-based tools and other technologies to enhance and engage the student anytime, anywhere.

#### **5. Enhance Online Learning Opportunities**

The District currently uses the A+ online learning system at the alternative high school (Francis Howell Union) and for credit recovery. There has been much success with this style of learning for students. Online learning tools allow for the delivery of diverse course offerings, even during tight budgetary times. Online learning is a way to offer courses not available in the District. The District should make annual goals to offer online courses for credit at the high schools with the possibility of dual or college credit in mind.

The District should investigate partnerships with local universities, other institutions and the state's online learning program to provide online course offerings for high school students.